



Application Form for the 2010-2011 High School Fire Science Program



Program Description

- The Montgomery County High School Fire Science program is a national award-winning one- or two-year program for high school juniors and seniors. This program educates and trains students to become firefighters and/or Emergency Medical Service (EMS) providers in Montgomery County, Maryland.
- The firefighting pathway and the EMS pathway are separate one-year programs, allowing students to choose either or both courses of study.
- Both programs are available to juniors and seniors. It is recommended, but not required, that juniors take firefighting their junior year and EMS their senior year.
- All classes are held from 11:00 AM to 1:30 PM, at the Montgomery County Fire Rescue Training Academy, 9710 Great Seneca Highway, Rockville, Maryland 20850.
- Montgomery County Public Schools will provide bus transportation to and from each student's home school, or students may drive to class in their personal vehicles with appropriate permission (MCPS Form 560-31).

Benefits/Credits/Certifications

- Students meet graduation requirements by completing the career pathway program.
- Students may receive up to eleven (11) college credits at the discretion of Montgomery College.
- Funds for college tuition costs are available as established by the Maryland Commission on Higher Education, State Scholarship Administration.
- Students will have the opportunity to earn and submit Student Service Learning hours during the school year.
- EMS cadets can earn certification as a Maryland Emergency Medical Technician/Basic (EMT/B) from the Maryland Institute for Emergency Medical Services Systems (MIEMSS).
- Cadet firefighters can earn Firefighter Level II certification by the Maryland Fire and Rescue Institute (MFRI), National Board on Fire Service Professional Qualifications (NBFSPQ) and International Fire Service Accreditation Congress (IFSAC).

Entrance Requirements

- Students must be 16 years of age on the day classes begin and have a 2.5 Grade Point Average (GPA) for the previous school year.
- Students must pass a National Fire Protection Association (NFPA) 1001 physical examination provided by the Montgomery County Fire Rescue Occupational Medical Services (FROMS) prior to the start of the school year. Also note that firefighting skills, lifting, and moving patients require appropriate physical fitness and strength. Students with respiratory disorders, such as asthma, may not be able to pass the NFPA 1001 physical examination.
- Students must fully complete the application by the April 9, 2010 deadline to be considered for acceptance into the Fire Science program. Completing the application by the deadline does not guarantee acceptance into the program.

Uniform Requirements

- Cadets are required to purchase midnight blue trousers, black oxford shoes, and 1 ½" black belt.
- The Academy furnishes one (1) long-sleeved and one (1) short-sleeved shirt.

Program Requirements

- Students must have a 2.5 GPA from the previous school year and maintain a 2.5 GPA while enrolled in the program.
- Students enrolled in either program of study must take modular-based written and practical skills examinations. **Failure to score 70% on any exam will result in dismissal from the program. Please see modules that follow. According to the Maryland Fire and Rescue Institute (MFRI), students scoring between 60-69 percent may have the opportunity to reassess after appropriate counseling or retraining.**
- Class work requires reading and comprehension of rigorous technical material, completion of daily homework assignments, and several research papers. Please see the list of required modules on the next page.
- **EMT/B students are required to pass all modules in their selected program before taking the state examination.**

- Any absence, whether excused or unexcused, beyond ten percent (10%) of the scheduled classes may lead to dismissal from the program.
- Practical training in the firefighter classes demand rigorous physical exertion, performing at extreme heights, functioning in confined spaces, and fighting fires under controlled conditions with direct supervision.
- Students participating in the program must provide written proof of private health insurance coverage.
- An internship program, including an assignment to a fire department or rescue squad, during class time is included with each course.

Students may choose to join a community volunteer fire/rescue department as a way to enrich the experience in the Fire Science program. **This volunteer experience is not required to complete the MCPS program. An affiliation with a department is required to maintain the EMT/B license. This volunteer experience is not supervised by the MCPS High School Fire Science program; students join these organizations at their own discretion.** If students choose to volunteer, it is recommended that all volunteer standbys be completed during daytime hours and in accordance with work guidelines set by the Fair Labor Standards Act. **Overnight stand-bys are not recommended and are highly discouraged.**

EMS Pathway

Module 1

- Blood Borne Pathogens
- Equal Employment Opportunity/ Affirmative Action (EEO/AA)
- Cultural Diversity
- Personal Protective Equipment (PPE)/FIT Testing
- Cardio-Pulmonary Resuscitation (CPR)
- HazMat
- Voice Radio
- Well Being of the EMT/B
- Infection Control
- Medical Legal Aspects
- Anatomy
- Vital Signs
- Lifting and Moving Patients

Module 2

- Airway/Oxygen Therapy

Module 3

- Scene and Initial Assessment
- Trauma and Detailed Physical Exam

- Trauma Assessment Skills
- Geriatric and Pediatric Assessment
- Triage and Multiple Casualty Incidents (MCI's)
- Communication and Documentation

Module 4A

- Pharmacology, IV Maintenance
- Respiratory Emergencies and Allergic Reactions
- Cardiac Emergencies and Automated External Defibrillator (AED) Introduction and Practice

Module 4B

- Diabetic Emergency and Acute Abdomen
- Neurological Disorders, Strokes, and Seizures
- Substance Abuse and Poisonings
- Environmental Emergencies
- Behavioral Emergencies

- Medical Emergency Skills Practice

Module 5

- Kinematics of Trauma
- Injuries (soft tissue, chest, abdomen, genitals, musculo-skeletal, head, and spinal)
- Splinting
- Spinal Immobilization
- Trauma Skills

Module 6

- Obstetrics/Gynecological Emergencies
- Pediatric Trauma

Module 7

- Ambulance Operations

Module 8

- Maryland Institute for Emergency Medical Services System (MIEMSS) State Practical Exam
- Advanced EMS Classes

Firefighter Pathway

Module 1

- Blood Borne Pathogens
- Equal Employment Opportunity/ Affirmative Action (EEO/AA)
- Cultural Diversity
- Personal Protective Equipment (PPE)/FIT Testing
- Cardio-Pulmonary Resuscitation (CPR)
- HazMat
- Voice Radio
- Fire Department Organization
- Hose and Rope
- Fire Behavior
- Ladders/Ventilation
- Fire Streams

Module 2

- Forcible Entry
- Water Supply
- Fire Extinguishers
- Wilderness Firefighting
- Search and Rescue
- Salvage and Overhaul

Module 3

- Building Construction
- Sprinklers/Elevators
- Fire Control
- Liquefied Propane Gas (LPG)/Foam
- Incident Command

Module 4

- Electrical Emergencies/Utilities
- Fire Investigation
- Fire Education
- Auto Fire/Containers
- Metro
- Auto Extrication

Module 5

- Firefighter II
- Flashover
- Survival and Rescue
- Truck company OPS
- Arson detection

HIGH SCHOOL FIRE SCIENCE PROGRAM APPLICATION

PERSONAL INFORMATION

CURRENT SCHOOL	
STUDENT ID #	
STUDENT NAME	
GENDER	
HOME ADDRESS	
HOME PHONE	
CELL PHONE	
E-MAIL ADDRESS	
AGE & DATE OF BIRTH	
CLASS NEXT SCHOOL YEAR	
SOCIAL SECURITY NUMBER OR NATIONAL ID NUMBER	

EMERGENCY CONTACT INFORMATION

PARENT/GUARDIAN	
CELL PHONE	
HOME PHONE	
EMAIL ADDRESS	
ALTERNATE CONTACT PERSON	
CELL PHONE	
EMAIL ADDRESS	
HEALTH INSURANCE CARRIER & POLICY #	
GUIDANCE COUNSELOR	
WORK PHONE	
EMAIL ADDRESS	

REQUIREMENTS

After conferring with your school counselor, select the program in which you plan to enroll during the 2010-2011 school year. Please check only one of the boxes below.

	<div><input type="checkbox"/></div> Fire Fighting-Pathway			<div><input type="checkbox"/></div> Emergency Medical Service-Pathway		
Semester	Title	Code	Credits	Title	Code	Credits
1	Essentials of Fire Fighting A	5423	1.0	Emergency Medical Technician/Basic	5453	0.5
				Emergency Medical Technician/Basic (Science)	3993	0.5
	Essentials of Fire Fighting Internship A	5421	0.5	Emergency Medical Technician/Basic Internship A	5458	0.5
2	Advanced Fire and Rescue Techniques B** ♦	5424	1.0	Emergency Medical Technician/Basic Internship B** ♦	5459	1.0
	Advanced Fire and Rescue Techniques Internship B	5422	0.5	Emergency Medical Technician/Basic (Science)	3994	0.5

**Certificate of Merit

♦ Student Service Learning Hours

An internship program, including an assignment to a fire department or rescue squad, is included with each of the courses listed above. This internship occurs during the 11:00 a.m.-1:30 p.m. class time.

Have you ever applied to the Fire Science Program?	YES NO
Will you need transportation to and from the Academy?	YES NO
<p>I have read and understand the program description, entrance requirements, and program requirements as listed on pages 1 and 2.</p> <p>I understand that I will be receiving the same type of training as Montgomery County career and volunteer firefighters. I also understand that the risk of injury or burn is a possibility due to the nature of the training I will to receive.</p> <p>I have shared the information on pages 1-5 with my parents/guardians and they have granted me permission to participate in this program including the station internship component. To the best of my knowledge, I have no physical condition that would impair my performance in the Fire Science program.</p>	<div style="display: flex; justify-content: space-around; font-size: 1.2em;"> I ACCEPT I DO NOT ACCEPT </div>
OVERALL GPA (UNWEIGHTED)	
# OF DAYS ABSENT LAST YEAR	
COMMENTS REGARDING ATTENDANCE	

RECOMMENDATIONS

The following School based staff have been asked to provide recommendations for this student.

GRADE LEVEL ADMINISTRATOR	
EMAIL ADDRESS	
TEACHER	
EMAIL ADDRESS	

Checklist: All applicants and their parents/guardians must complete the following checklist:

High School Fire Science Program 2010-2011 Application Checklist	
	Review the High School Fire Science program description (page 1).
	Review the High School Fire Science program entrance and completion criteria (page 1).
	Attach a copy of the school transcript.
	Completed a work permit.
	Complete the High School Fire Science pathway program application.

Forward this application by **April 9, 2010** along with an unofficial ***school transcript*** and completed ***work permit*** to:

Mr. Joseph J. Doody
MCPS Fire Science Liaison
Joseph_j_doody@mcpsmd.org
Damascus High School
25921 Ridge Road
Damascus, Maryland 20872

Any questions should be addressed to **Joseph Doody** at **301-253-7059** or e-mail...
Joseph_j_doody@mcpsmd.org

For more information visit: www.mcfirs.org/psta/fire-science

You will be contacted on or before June 5, 2010, concerning the status of your application. You will be scheduled during June or July for a complete NFPA 1001 physical. Students who fail to show up for the appointment may not be accepted into the program.

The Montgomery County Public Schools prohibits illegal discrimination on the basis of race, color, national origin, religion, gender, age, marital status, socioeconomic status, sexual orientation, physical characteristics, or disability. Inquiries or complaints regarding discrimination or Title IX issues such as gender equity and sexual harassment should be directed to the MCPS Compliance Officer, Office of the Deputy Superintendent, 850 Hungerford Drive, Room 129, Rockville, MD 20850, at 301-279-3126.